

## Relays Selection Guide, continued



| Description                       | D3 Series                                                                                                                                                                                                                                                                                                                               |      |      | D4 Series                                                                                                                                                                                                                                                                                                                                  |               | D5 Series                                                                                                                                                                                                                                                                                                                                       |      |
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|                                   | Page V9-T3-13                                                                                                                                                                                                                                                                                                                           |      |      | Page V9-T3-15                                                                                                                                                                                                                                                                                                                              |               | Page V9-T3-16                                                                                                                                                                                                                                                                                                                                   |      |
| Approvals                         |     |      |      |     |               |     |      |
| Features                          | Polycarbonate cover<br>Indicator lamp and pushbutton available<br>Panel and DIN mounting<br>8- or 11-pin octal plug-in<br>Latching (D3PR version)                                                                                                                                                                                       |      |      | Polycarbonate cover<br>Indicator lamp available<br>Panel and DIN mounting<br>Socket has built-in hold-down spring                                                                                                                                                                                                                          |               | Polycarbonate cover<br>Indicator lamp and pushbutton available<br>Panel, DIN and PC board mounting                                                                                                                                                                                                                                              |      |
| Contact Data                      |                                                                                                                                                                                                                                                                                                                                         |      |      |                                                                                                                                                                                                                                                                                                                                            |               |                                                                                                                                                                                                                                                                                                                                                 |      |
| Configuration                     |                                                                                                                                                                                                                                                                                                                                         | DPDT | 3PDT | SPDT                                                                                                                                                                                                                                                                                                                                       | DPDT          | DPDT                                                                                                                                                                                                                                                                                                                                            | 3PDT |
| Maximum allowable load            | 16A                                                                                                                                                                                                                                                                                                                                     | 16A  | 16A  | 10A at 250 Vac                                                                                                                                                                                                                                                                                                                             | 5A at 240 Vac | 16A                                                                                                                                                                                                                                                                                                                                             | 16A  |
| Material                          | Silver alloy                                                                                                                                                                                                                                                                                                                            |      |      | AgCdO                                                                                                                                                                                                                                                                                                                                      |               | Silver alloy                                                                                                                                                                                                                                                                                                                                    |      |
| Dielectric strength between poles | 1500V                                                                                                                                                                                                                                                                                                                                   |      |      | 5000V                                                                                                                                                                                                                                                                                                                                      |               | 1500V                                                                                                                                                                                                                                                                                                                                           |      |
| Coil Data                         |                                                                                                                                                                                                                                                                                                                                         |      |      |                                                                                                                                                                                                                                                                                                                                            |               |                                                                                                                                                                                                                                                                                                                                                 |      |
| AC                                | 6–240 Vac                                                                                                                                                                                                                                                                                                                               |      |      | 6–240 Vac                                                                                                                                                                                                                                                                                                                                  |               | 6–240 Vac                                                                                                                                                                                                                                                                                                                                       |      |
| DC                                | 6–110 Vdc                                                                                                                                                                                                                                                                                                                               |      |      | 6–110 Vdc                                                                                                                                                                                                                                                                                                                                  |               | 6–110 Vdc                                                                                                                                                                                                                                                                                                                                       |      |
| Power                             |                                                                                                                                                                                                                                                                                                                                         |      |      |                                                                                                                                                                                                                                                                                                                                            |               |                                                                                                                                                                                                                                                                                                                                                 |      |
| VA (Vac)                          | 3 VA, 1.4 Watts (D3PR and DPF)                                                                                                                                                                                                                                                                                                          |      |      | 0.9 VA                                                                                                                                                                                                                                                                                                                                     |               | 3 VA                                                                                                                                                                                                                                                                                                                                            |      |
| Watts (Vdc)                       | 2 VA 1.64 Watts (D3PR5 latching)                                                                                                                                                                                                                                                                                                        |      |      | 0.5 Watts                                                                                                                                                                                                                                                                                                                                  |               | 1.4 Watts                                                                                                                                                                                                                                                                                                                                       |      |
| General Data                      |                                                                                                                                                                                                                                                                                                                                         |      |      |                                                                                                                                                                                                                                                                                                                                            |               |                                                                                                                                                                                                                                                                                                                                                 |      |
| Ambient temperature               |                                                                                                                                                                                                                                                                                                                                         |      |      |                                                                                                                                                                                                                                                                                                                                            |               |                                                                                                                                                                                                                                                                                                                                                 |      |
| Storage                           | –40° to 185°F (–40° to 85°C)                                                                                                                                                                                                                                                                                                            |      |      | –40° to 158°F (–40° to 70°C)                                                                                                                                                                                                                                                                                                               |               | –40° to 185°F (–40° to 85°C)                                                                                                                                                                                                                                                                                                                    |      |
| Operational                       | –40° to 131°F (–40° to 55°C)                                                                                                                                                                                                                                                                                                            |      |      | –40° to 158°F (–40° to 70°C)                                                                                                                                                                                                                                                                                                               |               | –40° to 131°F (–40° to 55°C)                                                                                                                                                                                                                                                                                                                    |      |
| Response time                     | 20 milliseconds                                                                                                                                                                                                                                                                                                                         |      |      | 15 milliseconds                                                                                                                                                                                                                                                                                                                            |               | 206 milliseconds                                                                                                                                                                                                                                                                                                                                |      |
| Life                              |                                                                                                                                                                                                                                                                                                                                         |      |      |                                                                                                                                                                                                                                                                                                                                            |               |                                                                                                                                                                                                                                                                                                                                                 |      |
| Mechanical operations             | 5 million (D3PR and D3PF)<br>10 million (D3PR5 latching)                                                                                                                                                                                                                                                                                |      |      | 10 million                                                                                                                                                                                                                                                                                                                                 |               | 5 million                                                                                                                                                                                                                                                                                                                                       |      |
| Electrical operations             | 100,000                                                                                                                                                                                                                                                                                                                                 |      |      | 100,000                                                                                                                                                                                                                                                                                                                                    |               | 100,000                                                                                                                                                                                                                                                                                                                                         |      |

For our complete product offering, see Volume 7—Logic Control, Operator Interface and Connectivity Solutions, CA08100008E and PG05400001E.

## Relays Selection Guide, continued



| Description                       | D7 Series                                                                                                                                                                                                                                                                                                                               |           |           |           | D8 Series                                                                                                                                                                                                                                             |                | D9 Series                                                                                                                                                               |               |
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|                                   | Page V9-T3-18                                                                                                                                                                                                                                                                                                                           |           |           |           | Page V9-T3-20                                                                                                                                                                                                                                         |                | Page V9-T3-22                                                                                                                                                           |               |
| Approvals                         |     |           |           |           |    |                |   |               |
| Features                          | Polycarbonate cover<br>Indicator lamp and pushbutton available<br>Panel, DIN and flange mounting                                                                                                                                                                                                                                        |           |           |           | Dust cover<br>Panel, DIN and flange mounting<br>Quick-connect and screw terminals                                                                                                                                                                     |                | Dust cover<br>Pushbutton available<br>Panel mounting<br>Screw terminals                                                                                                 |               |
| <b>Contact Data</b>               |                                                                                                                                                                                                                                                                                                                                         |           |           |           |                                                                                                                                                                                                                                                       |                |                                                                                                                                                                         |               |
| Configuration                     |                                                                                                                                                                                                                                                                                                                                         |           |           |           |                                                                                                                                                                                                                                                       |                | 4PST                                                                                                                                                                    |               |
|                                   | SPDT                                                                                                                                                                                                                                                                                                                                    | DPDP      | 3PDT      | 4PDT      | SPST-NO                                                                                                                                                                                                                                               | DPST-NO        | NO                                                                                                                                                                      | NC            |
| Maximum allowable load            | 20A                                                                                                                                                                                                                                                                                                                                     | 15A       | 15A       | 15A       | 30A at 220 Vac                                                                                                                                                                                                                                        | 25A at 220 Vac | 25A at 220 Vac                                                                                                                                                          | 8A at 220 Vac |
| Material                          | Silver alloy                                                                                                                                                                                                                                                                                                                            |           |           |           | AgCdO                                                                                                                                                                                                                                                 |                | AgCdO                                                                                                                                                                   |               |
| Dielectric strength between poles | 1500V                                                                                                                                                                                                                                                                                                                                   | 1500V     | 2500V     | 2500V     | 4000V                                                                                                                                                                                                                                                 |                | 4000V                                                                                                                                                                   |               |
| <b>Coil Data</b>                  |                                                                                                                                                                                                                                                                                                                                         |           |           |           |                                                                                                                                                                                                                                                       |                |                                                                                                                                                                         |               |
| AC                                | 6–240 Vac                                                                                                                                                                                                                                                                                                                               |           |           |           | 6–240 Vac                                                                                                                                                                                                                                             |                | 24–240 Vac                                                                                                                                                              |               |
| DC                                | 6–110 Vdc                                                                                                                                                                                                                                                                                                                               |           |           |           | 12–24 Vdc                                                                                                                                                                                                                                             |                | 12–110 Vdc                                                                                                                                                              |               |
| Power                             |                                                                                                                                                                                                                                                                                                                                         |           |           |           |                                                                                                                                                                                                                                                       |                |                                                                                                                                                                         |               |
| VA (Vac)                          | 1.2 VA                                                                                                                                                                                                                                                                                                                                  | 1.2 VA    | 1.5 VA    | 1.5 VA    | 2.5 VA                                                                                                                                                                                                                                                |                | 2.6 VA                                                                                                                                                                  |               |
| Watts (Vdc)                       | 0.9 Watts                                                                                                                                                                                                                                                                                                                               | 0.9 Watts | 1.4 Watts | 1.5 Watts | 1.9 Watts                                                                                                                                                                                                                                             |                | 2.0 Watts                                                                                                                                                               |               |
| <b>General Data</b>               |                                                                                                                                                                                                                                                                                                                                         |           |           |           |                                                                                                                                                                                                                                                       |                |                                                                                                                                                                         |               |
| Ambient temperature               |                                                                                                                                                                                                                                                                                                                                         |           |           |           |                                                                                                                                                                                                                                                       |                |                                                                                                                                                                         |               |
| Storage                           | –40° to 185°F (–40° to 85°C)                                                                                                                                                                                                                                                                                                            |           |           |           | –4° to 185°F (–20° to 85°C)                                                                                                                                                                                                                           |                | –13° to 140°F (–25° to 60°C)                                                                                                                                            |               |
| Operational                       | –40° to 131°F (–40° to 55°C)                                                                                                                                                                                                                                                                                                            |           |           |           | –4° to 131°F (–20° to 55°C)                                                                                                                                                                                                                           |                | –13° to 140°F (–25° to 60°C)                                                                                                                                            |               |
| Response time                     | 20 milliseconds (30 milliseconds for latching)                                                                                                                                                                                                                                                                                          |           |           |           | 30 milliseconds                                                                                                                                                                                                                                       |                | 50 milliseconds                                                                                                                                                         |               |
| Life                              |                                                                                                                                                                                                                                                                                                                                         |           |           |           |                                                                                                                                                                                                                                                       |                |                                                                                                                                                                         |               |
| Mechanical operations             | 10 million                                                                                                                                                                                                                                                                                                                              |           |           |           | 5 million                                                                                                                                                                                                                                             |                | 1 million                                                                                                                                                               |               |
| Electrical operations             | 100,000                                                                                                                                                                                                                                                                                                                                 | 100,000   | 200,000   | 200,000   | 100,000                                                                                                                                                                                                                                               |                | 100,000                                                                                                                                                                 |               |

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